

BRIDGE CONSISTS OF

2 - 105'-6" BULB TEE, 56 IN, PSC BEAM SPANS ----- SPECIAL DESIGN
2 - 73'-9 1/2 " TYPE III PSC BEAM SPANS ----- SPECIAL DESIGN
WITH BULB TEE, 56 IN, PSC FASCIA BEAMS
2 - STEEL PILE END BENTS ----- SPECIAL DESIGN
3 - CONCRETE INTERMEDIATE BENTS ----- SPECIAL DESIGN
4 - END POST AND GUARDRAIL ATTACHMENT DETAIL ----- GA. STD. 3054 (9-30-02)
(2 - L = 4'-0"; W = 1'-1"; H = 2'-10")
(2 - L = 4'-9"; W = 1'-1"; H = 2'-10")
BAR BENDING DETAILS ----- GA. STD. 3901 (8-69)
TYPICAL FILL DETAIL AT END OF BRIDGE ----- GA. STD. 9037 (9-99)
CHAIN LINK WIRE FENCE ----- GA. STD. 9031N (8-13-85)

TRAFFIC DATA

TRAFFIC ----- ADT = 75,200 (2014)
ADT = 103,800 (2034)
DESIGN SPEED ----- 45 MPH
TRUCKS ----- 5%
24 HR TRUCKS ----- 9%
DIRECTIONAL ----- 51%

UTILITIES

16" Ø WATER MAIN ----- GWINNETT COUNTY DEPARTMENT OF WATER RESOURCES
6" Ø FIBER GLASS CONDUIT ----- GEORGIA DOT

GENERAL NOTES

SPECIFICATIONS - GEORGIA STANDARD SPECIFICATIONS, 2001 EDITION, AND 2008 SUPPLEMENTAL SPECIFICATIONS AS MODIFIED BY CONTRACT DOCUMENTS.
REINFORCING STEEL - PLACE AND TIE ALL REINFORCING STEEL IN ACCORDANCE WITH THE GEORGIA DOT SPECIFICATIONS. DO NOT WELD REINFORCING STEEL.
CHAMFER - CHAMFER ALL EXPOSED CONCRETE EDGES 3/4" UNLESS OTHERWISE NOTED.
TEMPORARY SHORING - TEMPORARY SHORING MAY BE REQUIRED TO CONSTRUCT SPREAD FOOTINGS AT BENTS 2, 3 AND 4 IF THE FOOTING EXCAVATIONS CANNOT BE SLOPED BACK SAFELY. DEWATERING OF THE EXCAVATION MAY ALSO BE REQUIRED. INCLUDE THE COST OF TEMPORARY SHORING AS NECESSARY FOR BRIDGE CONSTRUCTION IN OVERALL BID SUBMITTED.
TRAFFIC CONTROLS - SR 20 AND SR 316 TO REMAIN OPEN DURING CONSTRUCTION. SEE ROADWAY PLANS FOR TRAFFIC CONTROLS AND TRAFFIC CONTROL PAYMENT.
WAITING PERIOD - NONE REQUIRED.
FOOTING ELEVATIONS - DO NOT LOWER FOOTING ELEVATIONS, AS SHOWN ON THE PLAN, MORE THAN 3'-0" WITHOUT THE APPROVAL OF THE STATE BRIDGE ENGINEER.
FOUNDATION BACKFILL MATERIAL - PLACE 12" OF TYPE II FOUNDATION BACKFILL MATERIAL UNDER EACH FOOTING AT BENT 2 AND 3. THE QUANTITY IS BASED ON THE PLAN FOOTING DIMENSIONS PLUS 2'-0". THE USE OF THIS MATERIAL SHOULD BE AT THE DIRECTION OF THE ENGINEER AND MAY BE ELIMINATED DURING CONSTRUCTION IF THE FOOTING AREA IS DRY.
PLAN DRIVING OBJECTIVE - SEE SUBSTRUCTURE DETAILS.
PILE POINTS - REINFORCE ALL PILE TIPS AT BENT 5 IN ACCORDANCE WITH SECTION 520 AND 855 OF THE GDOT SPECIFICATIONS.
DRIVING DATA PILES - ONE DRIVING DATA PILE SHALL BE REQUIRED AT EACH OF BENTS 1 AND 5.
SMOOTH DOWEL BARS - PLACE SMOOTH DOWEL BARS IN FORMED 3" DIAMETER X 12" DEEP HOLES AND GROUT IN PLACE SIMILAR TO ANCHOR BOLTS, SEE SUB-SECTION 501.3.05.B.3 OF THE GEORGIA DOT SPECIFICATIONS. STIRRUPS MAY BE SHIFTED SLIGHTLY TO CLEAR FORMED HOLES.
WATER/SEWER MAIN HANGERS - PIPE ROLL SUPPORT ASSEMBLIES AND KEEPER STRAPS SHALL BE FURNISHED AND INSTALLED BY THE UTILITY OWNER. FURNISH AND INSTALL ALL OTHER COMPONENTS OF HANGER ASSEMBLIES AND INCLUDE THE COST IN THE OVERALL BID SUBMITTED.
UTILITY HANGERS - FURNISH AND INSTALL INSERTS. INSERTS SHALL BE ANVIL FIGURE 282, AAA TECHNOLOGY FIGURE 912 OR APPROVED EQUAL. INCLUDE THE COST OF FURNISHING AND INSTALLING INSERTS IN THE OVERALL BID SUBMITTED. ALL OTHER COMPONENTS OF HANGER ASSEMBLIES SHALL BE FURNISHED AND INSTALLED BY UTILITY OWNER.
STANDARD PLAN MODIFICATION - MODIFY THE APPROACH SLAB STANDARD TO INCREASE THE 3/4" EXPANSION JOINT SHOWN BETWEEN THE APPROACH SLAB AND THE BACK FACE PAVING REST AND END POST TO 1 1/4" AT BENTS 1 AND 5. SEE ROADWAY PLANS FOR APPROACH SLAB PAVEMENT.
GROOVED CONCRETE - GROOVE THE ENTIRE LENGTH OF THE BRIDGE TRANSVERSELY, INCLUDING UNDER THE RAISED MEDIAN, AS PER UNDER SUB-SECTION 500.3.05.T.9.C OF THE GEORGIA DOT SPECIFICATIONS.
PSC BEAMS - PRESTRESSED CONCRETE AASHTO BULB TEE 56 IN BEAMS SHALL BE PAID FOR AS "LF PSC BEAMS, AASHTO BULB TEE 54 IN".
CHAIN LINK FENCE - CHAIN LINK FENCE SHALL BE PAID FOR AS "LF CH LK FENCE, ZC COAT, 6 FT, 9 GA".
WELDING - ALL WELDING ON GEORGIA DOT PROJECTS SHALL BE PERFORMED BY CERTIFIED WELDERS THAT HAVE IN THEIR POSSESSION A CURRENT WELDING CERTIFICATION CARD ISSUED BY THE OFFICE OF MATERIALS AND RESEARCH. USE ONLY E70XX (EXCLUDING E7014 AND E7024) LOW HYDROGEN ELECTRODES FOR MANUAL SHIELDED METAL ARC WELDING.
INCIDENTAL ITEMS - INCLUDE THE COST INCIDENTAL TO THE WORK THAT IS NOT SPECIFICALLY COVERED BY THE GEORGIA STANDARD SPECIFICATIONS, SUPPLEMENTAL SPECIFICATIONS AND/OR SPECIAL PROVISIONS IN THE OVERALL BID SUBMITTED. THIS INCLUDES WATERPROOFING, JOINT FILLERS, AND OTHER INCIDENTAL ITEMS NECESSARY TO COMPLETE THE WORK.
CONCRETE PLACEMENT RATE - THE MINIMUM PLACEMENT RATE FOR THE CONCRETE DECK POUR SHALL BE 45 CUBIC YARD PER HOUR.

DESIGN DATA

SPECIFICATIONS ----- AASHTO, 17TH EDITION, 2002
(DESIGNED FOR SEISMIC PERFORMANCE CATEGORY A)
TYPICAL HS20-44 AND/OR MILITARY LOADING ----- IMPACT ALLOWED
FUTURE PAVING ALLOWANCE ----- 30 LBS PER SQ FT
CONCRETE: SUPERSTRUCTURE ----- CLASS AA, f_c = 3,500 PSI
PSC BEAMS ----- CLASS AAA, f_c = SEE BEAM SHEETS
PSC BEAM ALLOWABLE TENSION ----- SEE BEAM SHEETS
SUBSTRUCTURE ----- CLASS AA, f_c = 3,500 PSI
REINFORCEMENT STEEL: ----- GRADE 60, f_y = 60,000 PSI
PRETENSIONING STRANDS: ----- f_p = 270,000 PSI

SUMMARY OF QUANTITIES

PAY ITEM NUMBER	QUANTITY	UNIT	PAY ITEM
207-0203	94	CY	FOUND BK FILL MATERIALS, TYPE II
211-0200	613	CY	BRIDGE EXCAVATION, GRADE SEPARATION
441-0004	1490	SY	CONC SLOPE PAV, 4 IN
500-0100	4861	SY	GROOVED CONCRETE
500-1006	LUMP	LS	SUPERSTR CONCRETE, CL AA, BR NO - 8 (1795)
500-3002	966	CY	CLASS AA CONCRETE
507-9003	1874	LF	PSC BEAMS, AASHTO TYPE III, BR NO - 8
507-9030	3761	LF	PSC BEAMS, AASHTO, BULB TEE, 54 IN, BR NO - 8
511-1000	179128	LB	BAR REINF STEEL
511-3000	LUMP	LS	SUPERSTR REINF STEEL, BR NO - 8 (352076)
520-0573	18	EA	H-PILE POINTS, HP 14 X 73
520-1147	1155	LF	PILING IN PLACE, STEEL H, HP 14 X 73
520-4147	1	EA	LOAD TEST, STEEL H, HP 14 X 73 (IF REQD)
643-1152	705	LF	CH LK FENCE, ZC COAT, 6 FT, 9 GA

BRIDGE NO. 8



GEORGIA
DEPARTMENT OF TRANSPORTATION
PRECONSTRUCTION DIVISION-OFFICE OF BRIDGE DESIGN

GENERAL NOTES
SR 20 OVER SR 316
GWINNETT COUNTY MSL00-0004-00(086)

SCALE: NONE OCTOBER 2010

DESIGNED: FAQ	CHECKED: DRB	REVIEWED: WMD/WEI
DRAWN: CAB	DESIGN GROUP: X	APPROVED: PVL